

CONTENT

SECTION 1: GENERAL, SZD-48-3 “Jantar Standard 3” Type Design

- I. General
- II. Certification Basis
- III. Technical Characteristics and Operational Limitations
- IV. Operating and Service Instructions
- V. Notes

SECTION 2: Reserved

SECTION 1: GENERAL, SZD-48-3 “Jantar Standard 3” Type Design

I. General

Data Sheet No.: EASA.A.041	Issue: 01	Date: 22 July, 2005
1. a) Type:	SZD-48	
b) Variant:	SZD-48-3	
2. Airworthiness Category:	Utility	
3. Type Certificate Holder:	Allstar PZL Glider Sp. z o.o. ul. Cieszyńska 325 43-300 Bielsko-Biała POLAND	
4. Manufacturer:	Przedsiębiorstwo Doświadczalno-Produkcyjne Szybownictwa „PZL - Bielsko” ul. Cieszyńska 325 43-300 Bielsko-Biała +POLAND	
5. Certification Application Date:	---	
6. Polish CAA Certification Date:	March 17, 1983 (TC No. BG-119)	
7. The EASA Type Certificate replaces Polish Type Certificate No. BG-119/1-1, which replaced the BG-119 on March 25, 2002, due to TC transfer from PDPSz “PZL-Bielsko”.		

II. Certification Basis

1. Reference Date for determining the applicable requirements:	March 17, 1983.
2. Certification Basis:	see below
3. Airworthiness Requirements:	OSTIV Airworthiness Requirements for Sailplanes, September 1976.
4. Requirements elected to comply:	None.
5. EASA Special Conditions:	Directives for part strength certification of sailplanes and motorised sailplanes from glass and carbon composites, issued by LBA, July 1991.
6. EASA Exemptions:	None
7. EASA Equivalent Safety Findings:	None

III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Drawing No. SZD-483-00-10-00.
2. Description: Single seat, standard class glider. Cantilever high-wing monoplane with T-shaped tail unit (fixed stabilizer with elevator, fin and rudder). All composite glass-epoxy structure. Bipartite tapered wing may be equipped with winglets removable for transport. Retractable main landing gear with disk brake and without shock absorbers; fixed tail wheel. Plate airbrakes protruding from upper and lower surface of wing. Integral water ballast tanks in wings.
3. Equipment: standard equipment:
 - airspeed indicator,
 - altimeter,
 - compass,
 - bank-and-turn indicator,
 - rate-of-climb indicator,
 - towing hook (or hooks),
 - pilot safety belts.
4. Dimensions:

Span	15,00 m
Length	6,85 m
Height	1,51 m
Wing Area	10,66 m ²
Aspect Ratio	21,1
5. Launching Hooks:

Nose towing hook	or	TOST E 72
Bottom towing hook (optional)	or	SZD III A 56 c;
	or	TOST EUROPA G 72
	or	SZD III A 56 c.
6. Weak links: Nominal Strength: 6770 N ($\pm 10\%$)
7. Airspeeds:

Manoeuvring Speed	V _A	170 km/h IAS
Never Exceed Speed	V _{NE}	285 km/h IAS
Rough Air Speed	V _{RA}	200 km/h IAS
Max. Aero-tow Speed	V _T	150 km/h IAS
Max. Winch-launch Speed	V _W	125 km/h IAS
Max. Landing Gear Operating Speed	V _{LO}	250 km/h IAS
8. Operational Capability: VFR Day,
Cloud flying
9. Weights:

Maximum Weight with water ballast:	540 kg
Maximum Weight without water ballast:	390 kg
Empty Weight:	260 ÷ 270 kg

10. Centre of Gravity Range:

Empty glider with standard equipment:

- extreme front 500 mm
- extreme rear 540 mm

Centre of Gravity operational limits:

- extreme front 141 mm (19,0% MAC)
- extreme rear without water ballast 330 mm (44,5% MAC)
- extreme rear with water ballast (150 kg) 280 mm (37,8% MAC)

MAC is 742 mm; 0% MAC is on the same coordinates along longitudinal axis as the datum.

11. Datum:

Leading edge and wing-fuselage division plane intersection.

12. Levelling Means:

A trailing point of fuselage/wing section - 22 mm under a leading point of this section. Root chord is 950 mm.

13. Minimum Flight Crew:

1 (Pilot).

14. Maximum Passenger Seating Capacity:

0

15. Lifetime limitations:

Refer to Maintenance Manual.

16. Other limitations:

Aerobatic is permissible only without water ballast.

17. Deflection angles of control surfaces:

- | | | |
|-----------|---------|----------------------------|
| Aileron: | - up | $27^{\circ} \pm 2^{\circ}$ |
| | - down | $16^{\circ} \pm 1^{\circ}$ |
| Elevator: | - up | $32^{\circ} - 1^{\circ}$ |
| | - down | $18^{\circ} - 1^{\circ}$ |
| Rudder: | - left | $29^{\circ} \pm 1^{\circ}$ |
| | - right | $29^{\circ} \pm 1^{\circ}$ |

IV. Operating and Service Instructions

1. Flight Manual:

- Polish (I) Instrukcja Użytkowania w Locie szybowca SZD-48-3 „Jantar Standard 3”, wydanie I - luty 1983.
- Polish (II) Instrukcja Użytkowania w Locie szybowca SZD-48-3 „Jantar Standard 3”, wydanie II - sierpień 1987;
applies only s/n:
B-1639, B-1640, B-1689, B-1705 and B-1739.
- German Segelflugzeug SZD-48-3 „Jantar Standard 3”,
Flughandbuch, ausgabe - Juni 1983.
- English Flight Manual, SZD-48-3 „Jantar Standard 3” Sailplane,
issue I - February 1983.
- Russian Руководство по лётной эксплуатации планёра
SZD-48-3 „Jantar Standard 3”,
издание первое - февраль 1983.

2. Maintenance Manual:

- Polish (I) Opis Techniczny, Instrukcja Obsługi Technicznej,
Terminarz Prac Okresowych, szybowiec SZD-48-3
„Jantar Standard 3”, wydanie I - marzec 1983.
- Polish (II) Opis Techniczny, Instrukcja Obsługi Technicznej,
Terminarz Prac Okresowych, szybowiec SZD-48-3
„Jantar Standard 3”, wydanie II - sierpień 1987;
applies only s/n:
B-1639, B-1640, B-1689, B-1705 and B-1739.
- German Segelflugzeug SZD-48-3 „Jantar Standard 3”,
Wartungshandbuch, I ausgabe - März 1983.
- English SZD-48-3 „Jantar Standard 3” Sailplane,
Technical Description, Technical Service Manual
with the Schedule of Maintenance Works,
issue I - March 1983.
- Russian Планёр СЗД-48-3 „Янтар Стандарт 3”
Техническое описание,
инструкция по техническому обслуживанию
и регламент технического обслуживания,
издание первое - март 1983.

V. Notes

1. Serial Numbers:

- | | | |
|-----------------|-----------------|-----------------|
| B-1275 ÷ B-1304 | B-1638 ÷ B-1666 | B-2062 ÷ B-2074 |
| B-1345 ÷ B-1374 | B-1687 ÷ B-1716 | B-2117 ÷ B-2121 |
| B-1405 ÷ B-1464 | B-1737 ÷ B-1766 | B-2123 |
| B-1504 ÷ B-1533 | B-1882 ÷ B-1911 | |
| B-1564 ÷ B-1593 | B-1942 ÷ B-1971 | |

2. All glider outside surfaces exposed to sunlight must be white painted apart from registration number and anti-collision marking.

SECTION 2: Reserved